BOSTON, Mass., September 14, 1898.

To Lick Observatory: (Received 9:22 P. M.)

Comet PECHÜLE is WOLF'S comet, not TEMPEL'S.

(Signed) J. RITCHIE, Jr.

BOSTON, Mass., September 15, 1898.

To Lick Observatory: (Received 10 A. M.)

There is some uncertainty in your telegram. First position does not check. Repeat it. Is comet new?

(Signed) JOHN RITCHIE, Jr.

[In answer to this telegram, part of the telegram of September 14, 2:51 P. M., given above, was repeated with the addition of the word "new" before comet. The telegram on file in the W. U. office in San Jose was read by the operator and found to be correct.]

Lick Observatory, Sept. 15, 1898.

To Harvard College Observatory: }
To Students' Observatory, Berkeley: } (Sent 10 A. M.)

Comet PERRINE was observed by C. D. PERRINE on September 14.9768 G. M. T., in R. A. $9^h\ 47^m\ 36^s.8$; Decl. $30^\circ\ 4'\ 57''$.

Lick Observatory, September 15, 1898.

To Harvard College Observatory: (Sent 1:10 P. M.)

Elements and ephemeris of Comet PERRINE were computed by C. D. PERRINE and R. G. AITKEN as follows:—

$T = 1898$, October 20.02 G. M. T.

$\omega = 165^\circ\ 17'$
$\Omega = 36\ 5$ } Ecliptic and Mean Equinox of 1898.0
$i = 29\ 12$

natural $q = 0.3842$

[The ephemeris is here omitted.]

THE PERSEID SHOWER OF 1898.

Meteors from this radiant became noticeable on the night of August 8th. The night of August 9th was partly cloudy, but a number of meteors were seen in the early part of the evening. Thin clouds still interfered on the night of the 10th, but a larger number of meteors than usual from this radiant was observed. After the Moon rose it became clear overhead, and from $14^h\ 25^m$

to $14^h\ 55^m$ fifty-one meteors were counted, of which all but four were *Perseids*. This frequency was estimated to be about an average for the latter portion of the night. C. D. PERRINE.

LICK OBSERVATORY,
UNIVERSITY OF CALIFORNIA, August 16, 1898.

ELEMENTS OF COMET *e* 1898 (PERRINE).

The following system of parabolic elements of this comet has been derived from normal places for the dates June 16.0, July 12.0, and August 7.0. The observations used in forming the normal places were: Mount Hamilton, June 14, 15, 16, 17; Paris, June 16; Strassburg, June 17; Mount Hamilton, July 9, 11, 12, 13, 14; Mount Hamilton, August 2, 4, 5, 6, 7, 8.

ELEMENTS.

$T = 1898$, August 16.19978 G. M. T.

$\Omega = 259^\circ\ 6'\ 12''.2$
$\omega = 205\ 36\ 24\ .0$
$i = 70\ 1\ 36\ .7$
} Ecliptic and Mean Equinox 1898.0

$\log q = 9.796950$

The residuals for the middle place are:—

Observed — Computed,

$\Delta\lambda' \cos\beta'$	$+0''.1$
$\Delta\beta'$	$-0\ .9$

The comet was last observed at Mount Hamilton on the morning of August 11th, when it was well into the dawn. It would not have been visible except for its increased brightness and sharp nucleus. On August 7th, the nucleus of the comet was estimated to be nearly as bright as the 9.1-magnitude comparison star. The light of the entire comet probably equaled a seventh-magnitude star. The comet has now passed out of range of northern observatories, but should be visible in the Southern Hemisphere for two months yet. The orbit of this comet bears a resemblance to that of the PONS–BROOKS comet of 1812–1884. There is also considerable resemblance to the orbit of the comet 1785 I, especially in ω and i. Comet *e* is so plainly parabolic, that the resemblance must be considered as merely placing them in a group, probably with no physical connection. C. D. PERRINE.

LICK OBSERVATORY,
UNIVERSITY OF CALIFORNIA, August 25, 1898.